



WORKING ENVIRONMENT EFFECTS ON EMPLOYEE PRODUCTIVITY IN INDIAN CALL CENTERS

Dr. Disha Mathur*

Neha Ashawa**

*Assistant Professor, School of Management, Sir Padampat Singhania University, Udaipur.

** Research Scholar, Pacific University, Udaipur.

ABSTRACT

Employees who are well and happy with their work are a key factor in a successful company. It is important for the company to ensure that the working environment and conditions provide the right setting for employees to achieve peak performance in their work. Apart from the personal discomfort involved, work-related problems and ill-health cost money in the form of impaired quality, productivity losses, and increased employee turnover and sick leave. The workplace environment impacts employee morale, productivity and engagement - both positively and negatively. The work place environment in a majority of industry is unsafe and unhealthy. These includes poorly designed workstations, unsuitable furniture, lack of ventilation, improper lighting, excessive noise, insufficient safety measures in fire emergencies and lack of personal protective equipment. People working in such environment are prone to occupational disease and it impacts on employee's performance. Thus productivity of employees depends on the workplace environment. It is the quality of the employee's workplace environment that most impacts on their level of motivation and subsequent performance.

How well employees engaged with the organization influence their error rate, level of innovation and collaboration with other employees, absenteeism and ultimately time period to stay in the job. This paper presents the analysis of different work place environment factors of call centres in India and examines their impact on employee's productivity.

Keywords: Workplace environment, productivity, employee performance, motivation, call centres.

The workplace environment impacts employee morale, productivity and engagement - both positively and negatively. The work place environment in a majority of Call Centres is unhealthy. These includes: Poorly designed workstations, night shifts, lack of breaks, inappropriate headphones, rotational shifts, lack of support from team leaders etc. People working in such environment are prone to occupational disease and it impacts on employee's performance. Thus productivity is decreased due to the workplace environment. It is the quality of the employee's workplace environment that most impacts on their level of motivation and subsequent performance. How well they engage with the organization, especially with their immediate environment, influences to a great extent their error rate, level of innovation and collaboration with other employees, absenteeism and ultimately how long they stay in the job. So from employee's point of view creating a work environment in which they are more satisfied is very much necessary for their job satisfaction and growth.

"In the coming years, companies will succeed or fail depending on their ability to recruit and retain top skilled workers," said Hoskins. "Therefore, the office environment is taking on an increased responsibility to connect people and support strong corporate cultures that engage workers hearts and minds." Companies have come to realize the importance of comfort in the workplace environment, improving on functional ergonomic elements in order to retain quality personnel, increase productivity, and maintain a competitive edge. It is the quality of the employee's workplace environment that most impacts on the level of employee's motivation and subsequent performance. The main objective of this study is to find out the working environment factors impact on employee's productivity. The findings of this study show that these factors (like noise, furniture design etc) of environment is very vital in terms of increasing employees' productivity. Comfortable and ergonomic office design motivates the employees and increases their performance substantially. Most people spend fifty percent of their lives within indoor environments, which greatly influence their mental status, actions, abilities and performance (**Sundstrom, 1994**). Better outcomes and increased productivity is assumed to be the result of better workplace environment. Better physical environment of office will boosts the employees and ultimately improve their productivity.

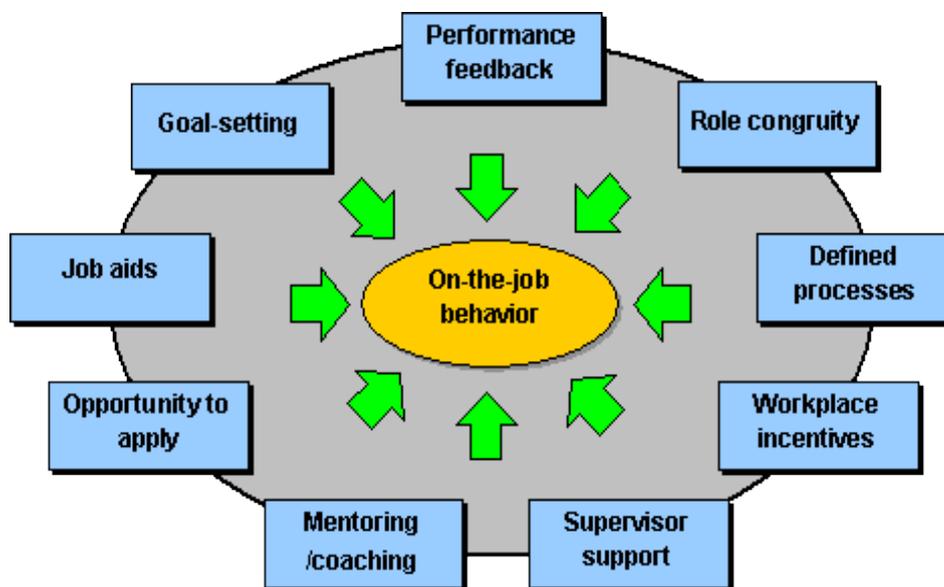
Workplace environment and Employee performance

An employee's workplace environment is a key determinant of the quality of their work and their level of productivity. How well the workplace engages an employee impacts their desire to learn skills and their level of motivation to perform. Skills and motivation level then influences an employee's: (businessperform.com, 2013)

- error rate
- output rate
- level of innovation
- collaboration with others
- absenteeism, and
- Length of service.

The most important of these workplace environment factors that either lead to engagement or disengagement are shown in the following diagram. A close consideration of each of these factors is also very useful in ensuring that employees apply the skills they learn during training programs once they return to their workplace. Tending to the structural and interpersonal aspects of each of these factors enables employees to apply the required skills in a consistent and habitual way.

Figure 1 – Workplace factors affecting employee performance



Source: http://www.businessperform.com/workplace-training/workplace_environment.html

Apart from above mention various other factors are there which will impact on employee's performance and productivity. This paper will analyze how different factors of working environment will impact on employee's performance.

Research Methodology

Objective

The objectives of the study are as follows: -

- 1) To identify what are the various factors of working environment which effects employee's performance.
- 2) To study the working environment factors impact on employees' productivity

Scope of the study

Scope of study is restricted to Indian Call Centre Industry. Various sources used for these are: Newspapers, Journals, Magazines and various websites etc.

Methodology

The study is an exploratory in nature & used secondary sources of information from books, articles from journals, and official web sites. The review of this study contains an overview on the academic discussion in the journals and related books in the fields of working environment and employee's productivity. Secondary sources of information such as research papers, white papers, blogs, articles in magazines and newspapers have been utilized to enrich the study.

Review of Literature

This section dwells on the theoretical and systematic analysis of documents containing information about the research problem in call centres. It is the relation of the existing literature on the research topic to the study and thus defines the boundary of this research.

a) In the context of Working Climate of Organization:-

Organisational climate has its roots in Gestalt psychology, with the concept of the 'whole'. As such, organisational climate is an umbrella term that covers a vast number of different themes, they include but are not limited to: managerial philosophy, leadership, supervisor support and guidance, group dynamics, employee attitudes and perceptions, job autonomy

and control, job satisfaction (Ashkanasy, Wilderom and Peterson, 2000), colleagues in the job as well as working conditions (Mashatola, 2003).

Essentially, by studying the climate of an organisation, one endeavours to understand more than the individual and more than the organisation – it is an exploration of people in a social context (Ashkanasy et al., 2000). Schwartz and Davis (1981) and Schlesinger and Balzer (1985) emphasise that although climate is often referred to as culture, they differentiate between the two concepts (as cited in Hutcheson, 1996). However, Denison (1996) does not view climate and culture as strongly differentiated, but rather that they “represent different but overlapping interpretations of the same phenomenon” (Ashkanasy et al., 2000), and so climate and culture are similar in that both concepts add to our understanding of organisations as a whole (Ashkanasy et al., 2000).

Organisational climate therefore, represents a “set of measurable properties of the work environment, perceived directly or indirectly by the people who live and work in this environment and is assumed to influence their motivation and behaviour” (Litwin and Stringer, 1968), whereas culture “refers to the deep structure of organisations” (Denison, 1996, p624 as cited in Patterson, Warr and West, 2004).

It has been stated that organisational climate is “embedded in the physical look of the place, the emotionality exhibited by employees, the experiences...of new employees upon entry, and myriad other artefacts that are seen, heard and felt” (Shein as cited in Ashkanasy et al., 2000).

It involves a series of variables, namely: environmental, personal and outcome variables. An environmental variable refers to the size and structure of organisations. Personal variables are those associated with a person’s attitude and motives that are carried into and conveyed within the work setting. Outcome variables denote the effect of the environmental and personal variables, such as satisfaction, motivation and productivity (Tagiuri and Litwin, 1968).

b) In the context of Organizational Climate and worker outcomes:-

Organisational Climate has been extensively researched and it is hypothesised that one’s environment significantly affects many worker outcomes, such as job satisfaction, employee well-being and even employee’s perceived commitment to the organisation (Carr, Schmidt, Ford and DeShon, 2003). Within the call centre environment, research indicates that for many call centre agents the work is boring, repetitive, demanding and stressful. This is because call centres perform a range of roles regarded as tasks with low value, where work is

repetitive and intense and call centre agents must work under pressure to keep up with quotas, while having very little influence over their work (**Arkin, 1997**).

In agreement with this, **Batt and Moynihan (2000)** state that more and more call centres are becoming like a ‘production line’ with jobs considered ‘low quality’ and repetitive, with limited task variety. Often call centre agents are provided with a ‘scripted’ response, which result in low control and high role conflict – factors that can be regarded as psychological risk factors (**Sprigg, Smith and Jackson, 2003**).

These stressful environments, requiring repetitive work in often unpleasant working conditions and monitoring every move will have negative outcomes. For example work overload or job pressures, feelings of lack of job satisfaction, which may affect one’s feelings of self-worth; these are negative emotional reactions (**Pinheiro, Troccoli and Tamayo, 2003**), which result in stress and have a detrimental effect on employee wellbeing. In addition to the ill health associated with a stressful work environment, this interaction of organisational environment and employee wellbeing has been seen to play a part in productivity and profits.

It is thus, of paramount importance to address factors which are seen to impact on economic factors (productivity and profits), technology (development of new products/services) and social factors (customers) (**Bartram, Robertson and Callinan, 2002 as cited in Patterson et al., 2004**).

c) Work environment & Employees:-

The need to provide a safe work environment for employees has had a long history in human resource management. In **Beer et al. (1994)** model of human resource management, it is acknowledged that work systems cannot only affect commitment, competence, cost effectiveness and congruence but also have long term consequence for workers’ well being, there is some evidence to indicate that work systems designs may have effects on physical health, mental health and longevity of life itself. Conducive work environment ensures the wellbeing of employees which invariably will enable them exert themselves to their roles with all vigour that may translate to higher productivity (**Akinyele, 2007**). **Longman dictionary of contemporary English (2003)** defines work environment as “all the situation, events, people etc that influence the way in which people live or work” while “work” is defined as “a job you are paid to do or an activity that you do regularly to earn money”.

Accordingly, **Kohun (1992)**, defines work environment as “an entirety” which comprises the totality of forces, actions and other influential factors that are currently and, or potentially

contending with the employee's activities and performance. Work environment is the sum of the interrelationship that exists within the employees and between the employees and the environment in which the employees work. **Brenner (2004)** was of the opinion that "the ability to share knowledge throughout organizations depends on how the work environment is designed to enable organizations to utilize work environment as if it were an asset. This helps organizations to improve effectiveness and allow employees to benefit from collective knowledge". In addition, **Brenner (2004)** argued that work environment designed to suit employee's satisfaction and free flow of exchange of ideas is a better medium of motivating employees towards higher productivity. Work environment when appropriately designed, motivates employees toward higher productivity. To attain the objective, management of any organization must identify those factors both in employment situation and in the psychology of the workers that best motivated them and to see to the provision of such factors in order to boost productivity. The work environment according to **Opperman (2002)** is a composite of three major sub environments viz: the technical environment, the human environment and the organizational environment. This environment creates elements that enable employees perform their respective responsibilities and activities. The human environment refers to peers, others with whom employees relates, team and work groups, interactional issues, the leadership and management. Human environment is designed in such a manner that encourages informal interaction in the work place so that the opportunity to share knowledge and exchange ideas could be enhanced. This is a basis to attain maximum productivity. Organizational environment include, systems, procedures, practices, values and philosophies. Management has control over organizational environment.

There are two types of work environment according to **Kyko (2005)**, which are conducive and toxic work environments. Conducive work environment gives pleasurable experience to employees and enable them to actualize their abilities and behaviour. This type of environment also reinforces self-actualizing behaviours. For instance, an irresponsible employee can change into a responsible employee in conducive work environment. Toxic work environment gives unpleasant experiences and at the same time, deactualize employees' behaviour. This environment reinforces low self-actualizing behaviours and it leads to the development of negative traits of the employees' behaviour. In toxic work environment, responsible and sensible employee can change into irrational and irresponsible employee as a survival strategy. **Kyko (2005)** identified six factors which contribute to a toxic work environment hence contributing to low productivity of workers. The factors are: opaque

management, biased boss, company's policies, working conditions, interpersonal relationship and pay.

Analysis and Interpretations

Following factors are included in Office work environment:-

- 1) The workplace
- 2) Visual and lightning conditions
- 3) Sound and noise conditions
- 4) Indoor climate and air quality
- 5) Furniture

***I)* The workplace**

It includes the place where employees work. Workplace must be suited to the requirements of the business and the needs of the employees. It can be Open-plan layouts, booths and separate rooms. All have their pros and cons. Select an open-plan solution if it is important to have rapid contact between staff, open general communication and an overview of the premises. Select separate rooms if freedom from disturbance and concentration on the task in hand are important. Special “quiet rooms” or “Nap rooms” and somewhere to lie down may be needed for those who need to rest and recover e.g. if they have a headache. It may be a good idea to bring in expertise (occupational health services, for example) during new construction or conversion work. (**arbetslivsinstitutet.se, 2010**)

Analysis:-

Generally in call centres an open plan layout is seen. As it give an overview and allow social interaction, which may be stimulating if the work itself is less absorbing. But in this layout more concentration required, as there is the great problem of disturbance. People's voices have a particularly disruptive effect on the power of concentration. It has been found that in open-plan office layouts it is very difficult completely to eliminate the disturbance from other's voices using acoustic measures such as screens. There is a greater risk of disturbing glare and Visual Display Unit (VDU)-reflection in an open-plan layout.

On the other hand the drawback of separate rooms is that an employee can feel left out and on their own when dealing with a difficult customer or if in need of help from a colleague or

supervisor. Many people feel stimulated by working in a large group. But providing separate rooms to each employee in call centre will increase the cost of company and practically it is not possible when the no of employees increases in organisation. So it has been analyzed that employees working at same level Example: agents (who attend the calls), should provide an open plan layout. So they can interact and discuss the problems with their colleagues immediately and can respond to customers properly. While separate rooms should be provided to higher level employees for the privacy of talks and documents. Various conference calls and discussions are there which they can't do in front of junior executives.

So different individuals have different needs of being on their own and their workplace requirement changes according to their level in organisation. So it plays an important role in enhancing their performance in organisation.

II) Visual & Lightning conditions

Good visual and lighting conditions are conducive to comfort and good performance. Computer work – at call centres, for example – places a strain on the eyesight. An appropriate lighting level can minimise the risk of eye problems. A general illumination level of around 300-500 lux has proved suitable for computer work. With open-plan layouts it is recommended that light fittings are used which fully or partly give indirect light, in other words light is directed up to the ceiling and then reflected and directed down to the workstations. In premises where direct light is used, in other words the light is directed downwards, it is important that the light fittings are equipped with shielding for diffusion and positioned immediately above or to the side of the computer operator. As the positioning of these fittings is critical, light fittings should also be adjusted when workstations are moved. Care should be taken with fittings that have a floodlighting effect, such as spotlights or down lights, which can lead to irritating glare. (arbetslivsinstitutet.se, 2010)

Analysis:-

An optimal visual condition is necessary for employees as their working hours are long .Continuously focusing on screen can create problems in eyes and vision. For optimum visual conditions, the lighting environment should be suited to the work in hand and the eyes should not become tired from constantly focusing on objects at a short range (documents,screen) or

be troubled by glare or reflection. The individual's vision should also be optimal, with or without suitable glasses.

Poor visual conditions can result in unsuitable work postures, eye and neck complaints, or headaches and tiredness. They can also result in poor work performance. If the general lighting is too bright for computer work, there may be problems of glare and eye strain when the eyes peer at the less intensely lit screen. On the other hand, if the general lighting is too dim, it may be difficult to read documents that are used in call centres. Operators can also become tired and sleepy in lighting conditions that are too dim. A suitable illumination level is usually specified as 300-500 lux. Following steps can help in reducing strain and increase productivity:-

- An extra desk-lamp is recommended at workstations so employees can adjust it according to their requirement.
- Suitably designed premises, light fittings and positioning of the workstations can minimize the risk of troublesome glare and Visual Display Unit - reflection.
- To relax eye muscles one should focus on something at least 5-6 meters away, preferably out of a window.
- At the time of construction of office take advice from a lighting expert and adjust the fittings accordingly will help a lot.

III) Sound and Noise conditions:-

Continues telephone calls are the picture of call centre. Call centre work is demanding on the hearing. Telephone calls with customers normally make up a large proportion of the working day. Telephone equipment that works well with good sound quality is therefore necessary for the work to be performed well. Telephone equipment should be equipped with noise-reducing devices to prevent potentially damaging noise or noise which is unpleasantly loud. For some people, a headset with one or two earpieces works best. Most people prefer a personal headset.

To ensure that customer calls can be heard clearly, the noise level in the office should not be disturbingly loud. Noise levels over 55 dBA should therefore be avoided. If the work demands a high degree of concentration, even levels of 40-45 dBA can be disturbing.

(arbetslivsinstitutet.se, 2010)

Analysis:-

From above it is clear that noise level below 55 dBA is recommended. Noise from other people's conversations is particularly disturbing; according to a large number of studies. The

most disturbances in call centres are due to the other operator voice particularly when there is Open plan layout. As all the agents sit on the same floor and speak continuously with customers. Distance between them is not too much. Disturbing noise can lead to mental tiredness and diminished motivation to perform well. These side-effects can be considerable, even though the operator may not actually feel disturbed during work.

This will create loose in concentration due to which agents won't be able to talk to customers properly, which results in decrease in productivity of employees. So maintaining a proper level of noise is suggested for high level of performance. Apart from this sometimes loud noise from headsets can arise due to technical problems. Therefore proper Telephone equipments should be fitted with devices to reduce noise level. This will help in reducing the disturbance while talking with customers and definitely increase their productivity. It should be taken care by senior supervisors that no one on the floor speaks loudly. Agent's voice should be that much only that it is audible to customer clearly.

IV) Indoor climate and air quality

A good indoor climate and air quality in the workplace enhances comfort and creates an optimum environment for good work performance. This requires, among other things, that the construction, dimensioning and maintenance of the ventilation system must take into account the type of work that is performed. It is a good idea to improve the ventilation over and above the minimum hygiene requirements. It is also important that the filters in the ventilation system are changed regularly. An air flow up to 25 l/s per person in the office and carbon dioxide levels below 800 parts per million (ppm) have been shown to give increased comfort and fewer problems with the eyes and the air passages. Optimal air quality and indoor climate can improve performance. Air temperature should be between 20 and 24oC, air-flow speed below 0.15 m/sec and humidity between 30 and 60% relative humidity.

If flexible working hours are used at the workplace, the ventilation system should be adapted so that there is sufficient ventilation during all working hours. Good office cleaning routines and dust-free offices are also conducive to comfort and freedom from illness, such as problems with the air passages. (arbetslivsinstitutet.se, 2010)

Analysis:-

It is clear that a proper level of air flow, carbon dioxide level, air temperature, air flow speed and humidity is necessarily require for good indoor climate. Any variation in there level will ultimately effect on employees productivity as they feel uncomfortable while working. Large number of agents on same floor and large heat generating instruments can create source of

poor air. So proper ventilation system and maintain carbon dioxide level is recommended. Daily cleaning routine helps in reducing the dust level .This will improve air quality and indoor climate.

V) Furniture

Office furniture comprises of desks chairs, the filing system, shelves, drawers, etc. All these components have a specific role to play in the proper functioning of any office and the productivity and the efficiency of the employees .And, one of the most important thing to be considered while buying office furniture is to ensure whether it is ergonomic or not. Ergonomics of office furniture is important because an employee has to work with them for the entire time that he is in office, and if they are uncomfortable and not user friendly, their working style and efficiency gets hampered considerably, in turn affecting the overall organizations. Non-ergonomic office furniture can also lead to health problems of employees, which again has an adverse effect on the productivity. Ergonomic office furniture ensures that each employee gels well with the things around him, like desks, chairs, computer alignment and even environmental factors **(Sehgal, 2012)**

Work chair

A good work chair:

- can be adjusted for height
- has adjustable backrest and armrests

Work desk

A good work desk:

- is easily adjustable in height, preferably electrically
- is sufficiently large – a minimum depth of 100 cm for conventional CRT screens or 80 cm for flat displays

(arbetslivsinstitutet.se, 2010)

Analysis:-

During study it has been realized that good furniture will directly effect on employees productivity. Ergonomic office furniture is today's requirement. It will reduce the stress and chance of injury. If furniture is easily adjustable and according to the requirement of employee then it will increase their morale and productivity. They feel comfortable while working. Now a day's companies consult and employ ergonomic experts that advices people

how to design their furniture, what type of furniture can reduce injury and bring more comfort to their employees.

Conclusion

This paper threw light on the different factors of working environment in call centres, how they are important for enhancing the organization/ employee's productivity. Figure 1 shows there are nine workplace factors which effects employee's performance. These factors will directly effect on the job behaviour of employees. Apart from these, other five important working environment factors have been analysed above. They are workplace, Visual and lightning conditions, Sound and noise conditions, Indoor climate and air quality, Furniture. During study it has been reveals that all these factors will directly impact on employee's productivity and tells us what are the optimal conditions for better productivity in call centres. Any changes in these factors will directly impact on employee's productivity.

No doubt every organization has working environment but to enhance the productivity of their employees there is only need of healthy working environment factors. The million dollar question is whether they are optimal or not? And moreover are they increasing the employee's morale and productivity? If organisations pay a close heed to this they are sure to earn mutual benefits in the long run.

References

- Adamu SO (1991). Productivity data and nation building. *J. Ind. Relat.* 5: 21-26.
- American Society of Interior Designers (1999) "Recruiting and retaining qualified employees by design."
- Akinyele Samuel Taiwo, School of Business, Covenant University, Ota, Ogun State, Nigeria *African Journal of Business Management* Vol. 4(3), pp. 299-307, March 2010 ISSN 1993-8233 © 2010 Academic Journals
- Arthur Jr., W., D. Woehr and W. Graziano. 2001. "Personality Testing in Employment Settings." *Personnel Review* 30 (5/6): 657-676
- Babakus E. and Boiler G.W., (1992), "An Empirical Assessment of the SERVQUAL Scale," *Journal of Business Research*, 24, May. 253- 268
- Baron, R. M. and D. A. Kenny. 1986. "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations."

- Barrick, M. R. and M. K. Mount. 1991. "The Big Five Personality Dimensions and Job Performance: A Meta-analysis." *Personnel Psychology* 44: 1-26. And J. P. Strauss. 1993. "Conscientiousness and Performance of Sales."
- Bing, M. N. and J. W. Lounsbury. 2000. "Openness and Job Performance in U.S.-based Japanese Manufacturing Companies." *Journal of Business and Psychology* 14 (3): 515-523
- Bnet Business dictionary 2008
- Brill, M. Margulies S, Konar E, BOSTI (1984) Using Office Design to Increase Productivity. Vol. 1, 1984: Vol
- Frye, C. M. 2001. The Effect of Emotional Stability on Job Satisfaction: A Meta-analysis. Dissertation Abstracts International Section A: Humanities and Social Sciences. June, 2001, Vol. 61 (11-A).
- <http://www.arbetslivsinstitutet.se/pdf/callcenter-guidelines.pdf>
- http://www.businessperform.com/workplace-training/workplace_environment.html
- http://wiredspace.wits.ac.za/bitstream/handle/10539/1980/SilverM_Chapter%201.pdf?sequence=3
- Kroemer KHE, Grandjean E. Fitting the task to the human. London: Taylor & Francis; 1997
- Mali P (1978). Improving Total Productivity. New York: John Wiley and sons.
- Noah Yusuf and Metiboba Steve *Journal of Sustainable Society* Vol. 1, No. 2, 2012, 36-43 ,
- Parasuraman, A., Zeithaml, V.A. and Berry, L. (1988) "SERVQUAL: A multiple item scale for measuring consumer perceptions of service quality", *Journal of Retailing* VOL.64 NO.1,pp 12-40
- Sehgal Shruti. *International Journal of Engineering Research and Applications (IJERA)* ISSN: 2248-9622 www.ijera.com Vol. 2, Issue 4, July-august 2012, pp.1992-1995,
- Sundstrom, 1994. *Journal of Public Affairs, Administration and management*, Volume 3, Issue 1,2009,
- Veitch JA, Newsham GR. Preferred luminous conditions in open-plan offices: research and practice recommendations. *Lighting Res Technol.* 2000; 32(4):199-212.
- Weihrich H, Koontz H (1994). *Management: A Global Perspective* 10th edition Singapore: McGraw Hill.

- Allan Toomingas, Philip Cohen, Christina Jonsson, Jon Kennedy, Tommy Mases, Kerstin Norman and Anita Odefalk(2006). A Sound Working Environment in Call and Contact Centres. ARBETSLIVSRAPPORT NR 2006:49. ISSN 1401-2928.